

EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:

1. A microphone comprising:

a hollow cylindrical housing with a lateral axis, and having two non-parallel
5 elliptical end faces oriented mirror symmetrically with respect to a plane perpendicular
to the lateral axis;

two circular transducer mounting plates extending across the housing,
adjacent the respective end faces, substantially perpendicular to the lateral axis;

10 two microphone transducers mounted centrally in respective ones of the
transducer mounting plates for receiving sound from outside the transducer mounting
plates;

end panels of air-pervious material extending across and closing the
respective end faces;

15 two sound damping tragus pads secured to inner faces of respective ones
of the end panels, each tragus pad having an elliptical periphery spaced from the
housing.

2. A hearing aid comprising:

a cylindrical housing with a lateral axis and having non-parallel elliptical
end faces oriented mirror-symmetrically with respect to a plane perpendicular to the
20 lateral axis;

two microphone transducers mounted in the housing to receive sound
from the respective end faces;

25 a housing mount for mounting the housing on an eyeglass frame such that
when worn, the lateral axis is substantially horizontal and the elliptical end faces
converge forwardly and downwardly;

amplifiers coupled to the respective microphone transducers for receiving
transducer signals therefrom;

earpieces including respective earphone transducers connected to the
amplifiers for receiving amplified transducer signals and converting the signals into

sounds.

3. A hearing aid comprising:

a cylindrical housing with a lateral axis and an elliptical end face;

a microphone transducer mounted in the housing to receive sound from
5 the elliptical end face;

an amplifier for receiving electrical signals from the microphone transducer
and amplifying the signals;

an earphone transducer for receiving amplified signals from the amplifier
and converting the amplified signals into sound waves;

10 an earpiece for mounting the housing on a human ear with the lateral axis
substantially horizontal and long axis of the elliptical end face sloping downwardly to
the front.

4. A hearing aid according to Claim 2 or 3 including a circular transducer
mounting plate extending across the housing, adjacent the elliptical end face,
15 substantially perpendicular to the lateral axis, the microphone transducer being
mounted centrally in the transducer mounting plate for receiving sound from outside the
transducer mounting plate.

5. A hearing aid according to Claim 4 including an end panel of air pervious
material extending across and closing the end face of the housing.

20 6. A hearing aid according to Claim 5 including a sound damping tragus pad
secured to an inner face of the end panel, the tragus pad having an elliptical periphery
spaced from the housing.

7. A hearing aid according to Claim 6 wherein the tragus pad comprises two
membranes secured together along the elliptical periphery, a stiffening material
25 between the membranes, and a viscous fluid in the space between the membranes.

8. A hearing aid according to Claim 7 wherein the tragus pad includes a
circular port on the lateral axis.

9. A hearing aid according to Claim 6 including particulate material filling the
housing between the transducer mounting plate and the tragus pad.

- 23 -

10. A hearing aid according to Claim 9 wherein the particulate material is a sound damping material.